

WHAT IS CLAIMED IS:

1-6. (Cancelled)

7. (Currently Amended) A method of producing a ~~metalloprotein inhibitor~~ antibody which inhibits an activity of gelatinase B, the method comprising:

(a) generating antibodies ~~directed at~~ using a composition comprising ~~including~~ a metal ion-bound chelator, wherein said composition is selected having structural and electronic properties similar to a functional domain of the ~~metalloprotein~~ gelatinase B; and

(b) testing an inhibitory effect of said antibodies on the ~~metalloprotein~~ gelatinase B, thereby producing the antibody which inhibits an activity of gelatinase B ~~metalloprotein inhibitor~~.

8. (Original) The method of claim 7, wherein said antibodies are polyclonal antibodies.

9. (Original) The method of claim 7, wherein said antibodies are monoclonal antibodies.

10. (Currently Amended) The method of claim 7, wherein said metal ion is a transition metal ion selected from the group consisting of ~~Vanadium, Selenium, Molybdenum, Cobalt, Zinc, Copper, Iron, Gallium, Bismuth, Aluminum, Gold, Platinum, Manganese, Chromium, Silver, Antimony, Thallium, Cadmium, Nickel, Mercury and Lead.~~

11. (Original) The method of claim 7, wherein said chelator is a polyamine.

12. (Original) The method of claim 11, wherein said polyamine is at least two histidine molecules.

13. (Currently Amended) The method of claim 11, wherein said polyamine is selected from the group consisting of ethylene diamine, cyclam, porphyrin, diethylenetriamine, triethylenetetramine, triethylenediamine, tetraethylenepentamine, aminoethylethanolamine, aminoethylpiperazine, pentaethylenhexamine, captopril, penicilamine, N,N' bis(3-aminopropyl) 1,3-propanediamine, N,N' Bis (2-aminoethyl) 1,3-propanediamine, 1,7-dioxo 4,10-diazaacyclododecane, 1,4,8,11-tetraaza-cyclotetradecane 5,7-dione, 1,4,7-triazaacyclononane, 1-oxa 4,7,10-triazaacyclododecane, 1,4,8,12-tetraazaacyclopentadecane, and 1,4,7,10-tetraazaacyclododecane..

14. (Currently Amended) The method of claim 7, wherein said composition is selected from the group consisting of tetra-carboxy phenyl porphyrin Co(II), tetra-carboxy phenyl porphyrin Zn(II), metal-bound aliphatic amino group containing compound, metal-bound alicyclic amino group containing compound and metal-bound peptides.

15-57. (Cancelled).